

**SPR 16<sup>TH</sup> ANNUAL MEETING  
PRECONFERENCE WORKSHOP IV  
May 27, 2008  
8:30 AM – 4:30 PM**

**Title   Antisocial Behavior: A Clinical and Social Problem Considered From  
Evolutionary Perspectives**

**Morning Sessions: Antisociality and Delinquency**

**Presentations from 8:30-10:00:**

Ralph Tarter (University of Pittsburgh): Overview

Tony Biglan (Oregon Research Institute): Evolution of Cultural Practices and Their Implications for Prevention”

Tom Dishion (University of Oregon): An Evolutionary Perspective on Problem Behavior and Deviance: Preventing Maladaptation Through Contextual Engineering

**Morning Break**

**10:00-10:15**

**Presentations**

**10:15-11:45**

S. Alexandra Burt, Ph.D. (Michigan State University): Developmental Changes in the Etiology of Aggressive and Rule-breaking Antisocial Behavior: An Evolutionary Interpretation

David Sloan Wilson (Binghamton University): EvoS and the Binghamton Neighborhood Project: A whole university/whole city approach to studying prosociality from an evolutionary perspective.

**General Discussion**

**11:45-12:00**

Q&As Moderated by Ralph Tarter and Diana Fishbein

**Lunch on your own**

**12:00-1:30**

**Afternoon Sessions: Antisociality and Drug Abuse**

**Presentations from 1:30-3:00**

Michael Vanyukov (University of Pittsburgh): Antisociality, addiction, and Evolution: Benefits of a Disadvantage

David Newlin (RTI International): Antisocial Behavior and Substance Abuse in Evolutionary Perspective

**Afternoon Break**  
**3:00-3:20**

**Open Discussion**  
**3:20-4:30**

**Moderated by Ralph Tarter and Diana Fishbein from 3:20-4:30**

**Chairs**      Ralph Tarter, Ph.D.  
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**Description**

Overall Purpose: Discussion of adaptive significance (survival, maturation, advantages, disadvantages, etc.) of developmental plasticity and behavior in various social contexts from a larger framework within which these behaviors are encompassed and evolved.

Most research in the social sciences emphasizes the unique or exceptional qualities of humans. Clearly behaviors such as tool-making, use of weapons, language and culture, if not distinctively human, are cardinal features of human identity. An alternative broader view conceptualizes human behavior within an evolution framework based on the many similarities between humans and other animals, particularly apes. Advances in molecular genetics have spurred this research; for example, humans and chimpanzees share a 99% genetic makeup.

A key principle in evolution is variation; that is, differences between individuals that place them at advantage or disadvantage to satisfy adaptive requirements contingent on specific environmental context. Thus, unlike most research in social science which focuses on measures of central tendency, the evolution framework emphasizes the importance of phenotype variation (structural and functional) that bias toward adjustment success or failure.

This one-day preconference will examine the evolutionary process of humanization; that is, where and how our apelike ancestors evolved into the modern human form. One evolutionary outcome is a massive neocortex and functional capacity for symbolic communication. Thus, for instance, whereas violence/aggressive behavior and threat display are established in the repertoire of other apes, it is useful to consider how these socially defined behaviors in humans (e.g. CD/ASPD, criminality) is manifest in humans, whether similar environmental conditions

foster this adaptational style, and how the cognitive apparatus mediated by the neocortex impacts on expression. Thus, one topic bears on the role of humanization as part of our evolutionary history that impacts on the expression of behaviors shared by other apes.

A second agenda involves comparisons of social organization between apes species to determine whether common factors are associated with particular behaviors that promote survival and reproduction. Three classes of behavior are important for a conference on conduct problems:

- 1) Aggression
  - Cognitive and affective communication
  - Social hierarchy competition
  - Infanticide
  - Inter-sex aggression
- 2) Mate (selection and competition)
  - Rape
  - Parental investment in offspring
  - Promiscuity
- 3) Cooperation
  - Alliance formation (gangs!)

Many behaviors having contemporary socially undesirable qualities but have adaptational value in other apes, in early human history, and in resource-poor environments. A challenge for researchers utilizing an evolution perspective is to understand the environment contexts in which particular behaviors selectively evolved. In this fashion, environmentally-based interventions can be applied which diminish the likelihood of specific socially unacceptable behaviors of being manifest.

### **Career Level & Prerequisites**

This workshop will be accessible to investigators with and without experience in genetics and neurobiology.

### **Methods**

The workshop will be interactive, and there will be opportunity for participants to ask questions about incorporating these measures into their research.

### **Materials**

Participants will receive a complete set of slides.